FINAL REPORT
NAG8-844
SUNY Grant 431-3795A

X-Ray Analyses of X-Ray Discovered Low Mass Pre-Main Sequence Stars

F.M. Walter, P.I.
21 December 1994

This grant was used to undertake analysis of archival EINSTEIN X-ray observations of the Scorpius-Ophiuchus, Chamaeleon, Orion, and Corona Australis star forming regions. We undertook ground-based followup observations to study the optical counterparts of the serendipitous X-ray sources. The main result was a detailed study of the low mass pre-main sequence population of the Scorpius OB2 association. We concluded that the low mass stars are coeval, and appear younger than do the high mass stars. We also concluded that the initial mass function is indistinguishable from that of the field stars.

The study of the EINSTEIN X-ray data in the Orion OB1 association is nearing completion. We have identified 250 new low mass pre-main sequence stars. The full analysis of the stellar properties is nearing completion, and a paper is in preparation.

This grant supported, in part, graduate students S.J. Wolk, K. Scollick, and F. Dudish.

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STONY BROOK

Department of Earth and Space Sciences

December 28, 2994

Angela Evans
Procurement Technician
Space Sciences Directorate
Procurement Office
NASA Goddard Space Flight Center
Greenbelt, MD 20771
Attention: Code 286.1

Dear Ms. Evans:

Please be advised that no inventions resulted from NASA account #NAG8-844, X-Ray Analyses of X-Ray Discovered Low Mass Pre-Main Sequence Stars.

Sincerely,

Frederick M. Walter
Project Director

Jack Petersen, Deputy Director
Technology Transfer
The Research Foundation of SUNY

State University of New York at Stony Brook
Stony Brook, New York 11794-2100
516-632-8200 Fax: 516-632-8240

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